

# SAFETY DATA SHEET

*Sodium Hydroxide 50%*

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION:

**MANUFACTURER:** Griffin Bros., Inc.  
P.O. Box 7719  
Salem, OR 97303

**INFORMATION PHONE:** (800) 456-4743

For Medical and Chemical Emergencies **CHEMTREC: 1-800-424-9300**

**PRODUCT NAME:** Sodium Hydroxide 50%  
**PRODUCT NUMBER:** G-SODHYD  
**DATE PREPARED:** 06/19/2007  
**LAST REVISION:** 06/24/2015

Uses: Boiler Water Treatment  
Restrictions: All other applications

PURE:  LIQUID:   
MIXTURE:  SOLID:

## 2. HAZARDOUS IDENTIFICATION:

**OSHA EMERGENCY OVERVIEW:** CORROSIVE!

**GHS CLASSIFICATION:** Corrosive to Metals (Category 1) Skin: (Category 1) Eyes: (Category 1) Acute aquatic toxicity (Category 3)

**GHS Label elements, including precautionary statements**

**SIGNAL WORD:** **Danger** **PICTOGRAM:**



**HAZARD STATEMENT(S):**

H290: May be corrosive to metals  
H314: Causes severe skin burns and eye damage  
H218: Causes serious eye damage  
H402: Harmful to aquatic life.

**PRECAUTIONARY STATEMENT(S):**

P234: Keep in original container  
P264: Wash skin thoroughly after handling.  
P273: Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P305 +P351 +P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER or doctor/ physician.  
P362: Take off contaminated clothing and wash before reuse.  
P405: Store locked up.

### POTENTIAL HEALTH EFFECTS

**EYE CONTACT:** Vapors, liquid and mists are extremely corrosive to the eyes. Brief contact of the liquid or mists will severely damage the eyes and prolonged contact may cause permanent eye injury which may be followed by blindness.

**INHALATION:** Vapors, liquid and mists are extremely corrosive to the nose, throat and mucus membranes. Bronchitis, pulmonary edema, and chemical pneumonitis may occur. Irritation, coughing, chest pain and difficulty in breathing may occur with brief exposure, while prolonged exposure may result in more severe irritation and tissue damage.

**INGESTION:** Vapors, liquid and mists are extremely corrosive to the mouth and throat. Swallowing the liquid burns the tissues, causes severe abdominal pain, nausea, vomiting and collapse. Swallowing large quantities can cause death.

**SKIN CONTACT:** Vapors, liquid and mists are extremely corrosive to the skin. Vapors will severely irritate the skin, and liquid and mists will severely burn the skin. Prolonged skin contact will burn or destroy surrounding tissue and death may accompany burns which extend over large portions of the body. A latent period may exist between exposure and sense of irritation.

**SIGNS AND SYMPTOMS OF EXPOSURE:** Irritation, pain, coughing, redness of skin.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name	CAS #	Range Wt %
SODIUM HYDROXIDE	1310732	. 50%

## 4. FIRST AID MEASURES:

**EYE CONTACT:** Immediately flush eyes with water for at least 15 minutes. Hold eyelids open while flushing the eyes. Get medical attention.

**INHALATION:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**INGESTION:** If swallowed, do NOT induce vomiting. Rinse with water. Get medical attention immediately. Never give anything by mouth to an unconscious or convulsing person.

**SKIN CONTACT:** Wash with soap and water. Change contaminated clothing. Get medical attention if irritation develops or persists.

**AGGRAVATED MEDICAL CONDITIONS:** Pre-existing eye, skin or respiratory conditions.

**SUPPLEMENTAL HEALTH INFORMATION:** The effects of long-term, low-level exposure to this product have not been determined. Safe handling of this material on a long-term basis should emphasize the avoidance of all effects from repetitive acute exposures.

## 5. FIRE FIGHTING MEASURES:

**EXTINGUISHING MEDIA:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None known. **COMBUSTION PRODUCTS:** Oxides of Carbon

**6. ACCIDENTAL RELEASE MEASURES:****STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:**

Small spills: Mop up, wipe up or soak up immediately. Remove to out of doors. Large spills: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE:****PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:**

Follow all SDS/label precautions even after container is emptied because it may retain product residues. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**OTHER PRECAUTIONS:** For industrial use only. Keep away from children.

**8. EXPOSURE CONTROL/PERSONAL PROTECTION:**

<b>Chemical Name</b> SODIUM HYDROXIDE	<b>OSHA PEL</b> 2mg/M3	<b>ACGIH TLV</b> C 2 mg/M3
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**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA approved respirator appropriate for vapor concentration at point of use.

**PROTECTIVE GLOVES:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

**VENTILATION:** Local exhaust sufficient to keep exposure below TLV.

**WORK/HYGENIC PRACTICES:** Use good personal hygiene when handling this product. Wash hands after use, before smoking, or using the toilet.

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

**EYE PROTECTION:** Use chemical safety goggles and/or full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work areas.

**OTHER PROTECTIVE EQUIPMENT:** Alkali resistant slicker, trousers and boots, safety shower, eyewash.

**9. PHYSICAL AND CHEMICAL PROPERTIES:****INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:**

<b>a) Appearance:</b> Clear, colorless liquid.	<b>k) Vapor pressure (mm/hg):</b> No data available
<b>b) Odor:</b> No appreciable odor.	<b>l) Vapor density (Air = 1):</b> No data available
<b>d) pH:</b> >14	<b>m) Relative density (Specific Gravity):</b> 1.47
<b>e) Melting point/freezing point:</b> No data available	<b>n) Water solubility:</b> Complete
<b>f) Initial boiling point and boiling range:</b> 288°F	<b>p) Auto-ignition temperature:</b> n/a
<b>g) Flash point:</b> n/a <b>Method Used:</b> n/a	<b>r) Viscosity:</b> No data available
<b>h) Evaporation rate:</b> No data available	<b>-) Pounds Per Gallon:</b> 12.3
<b>j) Upper/lower flammability or explosive limits:</b> UEL: n/a LEL: n/a	<b>OTHER:</b> No other data is available for this product. . . .

**10. STABILITY AND REACTIVITY:**

**STABLE:** Stable under recommended storage conditions.

**INCOMPATIBILITY:** Strong acids, Organic materials, Chlorinated solvents, Aluminum, Phosphorus, Tin/tin oxides, Zinc

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Oxides of carbon.

**HAZARDOUS POLYMERIZATION:** Will Not Occur

**CONDITIONS TO AVOID:** Contact with incompatible materials..

**11. TOXICOLOGICAL INFORMATION:** None of the components of this product are listed as carcinogens. No other data available.

**12. ECOLOGICAL INFORMATION:** No data available

**13. DISPOSAL CONSIDERATIONS:** Dilute with large amounts of water, neutralize with dilute acid, and dispose to municipal or industrial waste Treatment facility in accordance with applicable regulations.

**14. TRANSPORT INFORMATION:**

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1824	Sodium Hydroxide Solution	8	II

ERG No.: 154      **REPORTABLE QUANTITY: (RQ):** 2000 lbs

**15. REGULATORY INFORMATION:** This product complies with 21 CFR 173.310 Food and Drug Boiler water Additives.

**16. OTHER INFORMATION:**

**HMS INFORMATION:**      **HEALTH:** 3      **FLAMMABILITY:** 0      **PHYSICAL HAZARD:** 1      **PROTECTIVE:** X

**NFPA INFORMATION:**      **TOXICITY:** 3      **FIRE:** 0      **REACTIVITY:** 0

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